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ABSTRACT

Primarily intended to generate a demographic profile of the typical student user of Minnesota University's Walter Library, this follow-up to a 1983 study was also designed to ascertain which areas, materials, and services are used most frequently by students, what activities occupy students during their visits to the library, and why students choose Walter Library instead of another library. The study also tested whether or not significant correlations exist between the students' demographic characteristics and the use/nonuse of library areas, materials, and services. Data were collected by means of self-administered questionnaires completed by 646 students out of a systematically selected sample of 922 students exiting the library during one day of normal hours of library operation. Although a demographic profile was developed from descriptive study data, analysis of independent and dependent variables indicated that relationships among variables were statistically weak and therefore of limited predictive usefulness. It is suggested that a future survey include both users and nonusers as well as incorporating evaluation variables. Appendices include the survey questionnaire, a listing of descriptive statistics, a graph depicting the frequency distribution of the time at which respondents exited the library, and 30 tables of multiple regression analysis of demographic variables. A 15-item bibliography is also included. (KM)

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USE OF THE UNIVERSITY OF MINNESOTA'S WALTER LIBRARY: A SURVEY OF STUDENT USERS

Kathleen L. Gorman

May, 1983

Walter Library
Reference and Information Services
University of Minnesota

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Introduction

As funds for libraries dwindle, there is an increasing need for formal library studies which will determine who uses specific libraries and which services and materials are most vital to these patrons. The resultant data from such studies is needed in order to support planning and decision-making in each library. Formal surveys, as opposed to casual assumptions, allow libraries to cumulate information about their patrons which surpasses superficial observations. This in turn leads to a more precise allocation of funds toward relevant materials and services for library users.

The academic community is currently undergoing a series of financial crises. As more demands are made for retrenchments in college and university budgets, these institutions' libraries are forced to make further cuts in materials and services. It is important that those materials and services which remain are those which are most relevant to each library's specific patron needs.

The University of Minnesota, a state-funded institution, is not immune to financial difficulties. An increasing deficit in the State of Minnesota's budget during the past few years has prompted numerous and often drastic cuts throughout the University. Walter Library serves a clientele that numbers over 5000 users per day, and is one of the major libraries in the University's system of 37 libraries. Forced to make cuts in most areas of the library's operation, it has become necessary to determine which areas of the library's operation are most important to maintain in order to provide quality service for Walter Library's patrons.

Walter Library's role in the University's library system is that of the "main" library for the east bank of the Minneapolis campus. The library's

collection of 361,268 volumes consists primarily of materials in Childrens' Literature, Art, Music, Education, Psychology, and Library Science. The collection also includes a smaller general set of materials concerned with the Humanities, Sciences, and Social Sciences. Despite the library's subject orientation, it was believed that Walter Library was serving a student clientele whose subject orientation was both within and beyond the scope of its collection. The purpose of this study was to determine exactly which students are using Walter Library, their reasons for choosing Walter Library instead of another library, their activities while in the library, and what areas, materials, and services they used during their visit.

In attempting to develop a general profile of the student users of Walter Library, it was not possible to examine in minute detail the various services or materials offered in the different areas of the library. Defining a broad student user profile necessitated sacrificing comprehensive coverage of each unit of service. It was also decided to exclude evaluation of the library's materials and services in this study. The overwhelming majority of Walter Library's users are students at the University of Minnesota, therefore this study does not include data on faculty or staff users, or users not affiliated in any way with the University of Minnesota.

Knowledge of Walter Library's student users and their needs is crucial to the library's successful response to these needs via its materials and services. This study provides a basis from which future plans and decisions regarding Walter Library can be based, and also provides data which can be generalized to other comparable academic libraries.

Review of the Literature

A review of the current literature dealing with library use by library patrons reveals a wide variety of approaches and emphases. Three basic conceptual approaches to the measurement of library use emerge: use, user, and uses studies (15). This study is concerned with measurement of use/nomuse of the library via the library user and will concentrate on those studies also dealing with measurement of library users.

Burns' study at San Diego State University (1) examined the relationship between use and non-use of the Education Resource Center and selected socio-economic characteristics of the students. A self-administered questionnaire which yielded 140 student responses provided data which indicated little difference between personal characteristics of users and non-users of the library. The typical student was a female (64%) graduate student (56%) majoring in Secondary Education (49.4%), with a GPA between 3.00 and 3.49 (49.4%). The study also indicated that there was an increasing use of the library as students progressed through the university. The average non-user was found to regard the use of the library as strictly course-related.

At Pahlavi University in Iran, Emdad and Rogers (2) conducted a user study by utilizing a self-administered questionnaire. An analysis of the 440 usable responses indicated that student use of the library increased with the student's progress through the university. Forty-seven percent of the freshmen versus 72% of the seniors spent one to three hours per day in the library. However, most of this time in the library was spent by students reading their own books and notes. Fifty percent of the students felt that there was no need to use library materials as they found

their own textbooks and class notes to be sufficient. Sixty-three percent of the students reported that few or none of their teachers mentioned or recommended books in class, thus suggesting a possible relationship between student use of the library and faculty attitudes toward the library.

In Fiedler's attempt to identify the total user population of the library facilities in the Washington University library system (3), 3802 students, staff, faculty, and other non-university patrons of the libraries were interviewed upon leaving the library during a week's time. The majority of users were students studying on the libraries' premises for class-related activities (85%). Few demands were made on staff members. Sixty-three percent of the respondents reported seeking no help at all from the library staff. Respondents reported using the library to do classwork reading (58%), to do class-related research (22%), to study for a test (5%), and to do research which was not class-related (1%). A large majority of the respondents indicated that they visited the library for some purpose at least once a week, with many of these respondents noting five or more visits per week.

A study by Gratch at SUNY/Brockport (4) which utilized a self-administered questionnaire reported that 83% of the student respondents used the library at least once a week. Although all classes used the library equally in terms of time spent, seniors were found to utilize more of the library's services than did freshmen. Student response indicated that almost 82% studied their own books or notes when visiting the library.

Two of Kodras' and Prather's objectives in conducting a user survey at Georgia State University (5) were 1) the determination of the users of the library, and 2) the frequency of library use by these users. Ap-

proximately 52% of the 6406 distributed self-administered questionnaires were returned. The typical user was found to be a male upperclassman majoring in Liberal Arts or Business Administration. Over 36% of the students indicated Business majors, with another 33% indicating majors in the Humanities, Social Sciences, or Physical Sciences. Upperclassmen and graduates comprised 72% of the student respondents, and underclassmen comprised 20%. Fifty-seven percent of the respondents were males and 43% were females. The majority of respondents (39%) were between 23 and 29 years of age. Frequency of use questions indicated that 82% of the students used the library at least once a week. Of the 82%, 38% indicated that they used the library more than once a week, and 33% indicated daily use.

A self-administered questionnaire completed by 418 members of the undergraduate population during Linton's study of library users at the College of Charleston (6) yielded data on who did and did not use the library, why the library was used or not used, how the library was used, and what areas of the library's materials and services were deemed satisfactory or unsatisfactory. The conclusion of the study was that the majority of the student population at the College of Charleston do not use the library. Among students, 40% came to the library once a week or more, but not daily. Fifty-three percent of the students used the library once a week or more for the purpose of studying their own materials.

In a study done by Mount and Fasana at Columbia University (7), twelve types of surveys were used to identify major users of the libraries, and to evaluate and measure users, services, and materials. Over 15,000 responses were accumulated with the results arranged into three categories - type of user according to the library used, type of user according to the

services used, and type of user according to the service used in each library. Graduate students were found to be the heaviest users of circulating materials and of study facilities. The study concluded that the effect of graduate student use of the libraries should become an important determinant in planning future library services and materials.

Obtaining a user profile was one of the goals of a user study done by Murphy at the U.S. Air Force Academy Library (8). The study, utilizing a self-administered questionnaire, yielded 419 responses from cadets. In contrast to other user studies, these students indicated that their heaviest use of the library was for the purpose of researching a term paper or class project. Studying in the library was stated as a secondary use. These results reflect an averaging of the data - when broken down by class, freshmen were found to use the library most heavily for studying while seniors used the library mostly for research. Sixty-four percent of the students visited the library at least once a week. Freshmen were the heaviest users with 90% of the freshmen respondents coming into the library at least once a week. In contrast, only 27% of the seniors came to the library at least once a week. Student results of the survey were felt to be contingent on environmental factors; i.e., the isolation and uniqueness of the Academy's setting, and therefore not easily generalized to other student populations.

Peischl's study at the University of Northern Colorado (9) concluded that no significant relationship existed between student library use and the variables of sex, college/major, class, or GPA. The majority of students entered the library one to three times per week for the main purpose of studying their own materials. Females were found to use the library more often than males. Upperclassmen used library materials more often

than did underclassmen who mainly used the library as a place in which to read their own materials.

In Rzasa and Moriarty's user study at an unidentified academic library (11), a questionnaire yielded 6568 responses from faculty, graduate students, undergraduate students, and others. It was discovered that graduate students mainly visited the library to find and read material required for a course (30%) and that undergraduate students mainly visited the library to do homework with their own books (over 50%). Over 70% of the graduate students reported using a variety of library resources during their library visits, but over 50% of the undergraduate students reported using their own books and notes during their visits to the library. The study concluded that the graduate student group and the undergraduate student group differed in respect to their reasons for coming to the library, and in the library materials which they used.

A California State University user study by Schlachter (12) cumulated 1263 student, faculty, staff, and alumni responses to a self-administered questionnaire on library use. A profile of the "average" student respondent emerged - a senior or graduate student carrying more than 12 credits per quarter, and majoring in one of the departments in the School of Letters and Sciences. Heavy library users came primarily from Engineering, Science and special programs with the majority studying their own materials. Users spending less time in the library were those in Fine Arts, Education, and Applied Arts, but the majority of these patrons used library resources when visiting the library. A majority of the student respondents (75.2%) indicated that they spent four or more hours per week in the library. Overall, the use of the library was determined to be course-inspired.

A student and faculty questionnaire administered at the Elmer Holmes Bobst Library by Tannenbaum and Hoban (13) concluded that students shared common needs, concerns and attitudes. The majority of students used the library for course-related assignments, research, or study facilities, and sought staff assistance on a regular basis. Approximately half were undergraduate and half were graduate students. Eighty-five percent of the library users were between 18 and 30 years old, with 63% falling into the 18 to 24 year old range. Fifty-seven percent of the respondents considered themselves to be heavy users (using the library at least once a week), with 35% of these respondents using their own materials when visiting the library. Another 32% indicated that they used library materials for course-related purposes.

Whitlatch's San Jose State University Library survey (14) yielded frequent-user profiles for students. Self-administered questionnaires were completed by 1470 students. The typical frequent student user of the library was found to be a full-time male Asian or Chicano graduate student taking both day and evening classes, majoring in either Engineering or the Humanities, and maintaining a GPA of 3.6 or better. Students were found to rely equally upon information from the library, information from their own books and periodicals, and information from professors. The majority of student users (23.9%) claimed that they used the library less than once a month.

In reviewing the above studies, two problems become clear. The first problem is, how do we identify a user? No one consistent pattern emerges from the instruments of the above studies. Some emphasize the user, some the user's behavior, and others still the user's patterns of

library usage. The wide variety of measures used to identify library users indicates that the basic concept of what a library user is needs to be clarified (15). The other problem lies in determining exactly how useful these studies are. The above studies can be considered useful only in a limited respect. The researchers have compiled a series of percentages in order to define their respective libraries' users, or, in a few cases, have provided simple crosstabulations of some of their research variables. None of the surveys provided any extensive correlations of research variables. This omission prohibits the generalization of these research data to other academic libraries. In addition, once the data have been collected and analyzed, and corrective measures taken within the library, the project is largely abandoned, and no follow-up measures are taken to determine just how effective the whole process has been. If user studies are to be effectively used in libraries' planning processes, standards of measurement and an emphasis on the importance of follow-up measurement must be adopted on a large-scale basis. Until steps are taken to correct these problems on a universal basis, the following study can only be applied specifically to the library under examination while providing broad generalizations from which other libraries can base further research.

Objectives

Previous to this study, no documentation existed regarding the student users of Walter Library. The primary objective of this study was to develop a demographic profile of the typical student user of Walter Library. Other objectives included ascertaining what areas, materials and services are used most frequently by students, what activities occupy students during their visits to the library, and why the students chose Walter Library instead of another library. In addition, this study tested whether or not significant correlations exist between the student's demographic characteristics and the use/nonuse of library areas, materials, and services.

Hypotheses

In order to fulfill the objectives of this study, the following five hypotheses were tested:

Hypothesis 1: The number of visits made to Walter Library within the past year is a function of class, major, student status, graduate assistantship, credits, grade point average, sex, citizenship, language, age, and campus on which most of the student's time is spent.

Hypothesis 2: The duration of a visit to Walter Library is a function of class, major, student status, graduate assistantship, credits, grade point average, sex, citizenship, language, age, and campus on which most of the student's time is spent.

Hypothesis 3: The use/nonuse of each specific area in Walter Library is a function of class, major, student status, graduate assistantship, credits, grade point average, sex, citizenship, language, age, and campus on which

most of the student's time is spent. A series of hypotheses were developed in order to test the use/nonuse of each specific area in the library; e.g., the use/nonuse of the Kerlan Collection is a function of class, major, student status, graduate assistantship, credits, grade point average, sex, citizenship, language, age, and campus on which most of the student's time is spent. Similar hypotheses were tested for Reserve, the Education/Psychology/Library Science Library, the Second Floor Lobby, the Learning Resources Center, the Music Library, the Art Library, the Library Book Stacks, Archives, the Chemistry Library, and the 24-Hour Study Room.

Hypothesis 4: The use/nonuse of specific materials in Walter Library is a function of class, major, student status, graduate assistantship, credits, grade point average, sex, citizenship, language, age, and campus on which most of the student's time is spent. A series of hypotheses were developed in order to test the use/nonuse of specific materials in the library; e.g., the use/nonuse of scholarly journals or periodicals is a function of class, major, student status, graduate assistantship, credits, grade point average, sex, citizenship, language, age, and campus on which most of the student's time is spent. Similar hypotheses were tested for popular magazines; newspapers; reference materials; books, monographs, or individual works; microfilm, microfiche, or microcards; phonograph records or audiotapes; films, slides, or videotapes; reserve materials; other unlisted materials; and no materials at all.

Hypothesis 5: The use/nonuse of specific services in Walter Library is a function of class, major, student status, graduate assistantship, credits, grade point average, sex, citizenship, language, age, and campus on which

most of the student's time is spent. A series of hypotheses were developed in order to test the use/nonuse of specific services in the library; e.g., the use/nonuse of the librarians' assistance is a function of class, major, student status, graduate assistantship, credits, grade point average, sex, citizenship, language, age, and campus on which most of the student's time is spent. Similar hypotheses were tested for the computerized literature search service, public-access photocopy machines, the photocopy service, other unlisted services, and no services at all.

Procedure

Population and Sample

The population for this study consisted of students at the University of Minnesota who are users of Walter Library. The study was designed as a cross-sectional survey of this population. In order to increase the reliability of the data describing student use of the library, data were collected from students immediately after their use of the library. Consequently, the data were collected by means of a self-administered questionnaire from a systematically selected sample of students exiting the library during one typical day in the Spring Quarter of 1983. Of the 922 students approached, 646 agreed to participate for a response rate of seventy percent. A detailed discussion of the sampling procedure is provided in the Data Collection section on pp. 16-17.

Instrumentation and Measurement

A copy of the questionnaire is provided in Appendix I on pp. 34-38.

The following discussion of dependent and independent variables details the measurement of those variables which are included in the five hypotheses outlined previously in this study.

Dependent Variables

In order to determine the number of visits made to Walter Library within the past year, subjects were asked to estimate how frequently they had visited Walter Library during the past year by selecting a response on a seven point interval level scale (1 = once a month or less, 7 = more than once daily).

In order to determine the duration of the visits made to Walter Library, subjects were asked to approximate the length of that day's visit to

Walter Library by filling in the number of hours and/or minutes in the appropriate blank spaces.

In order to determine what areas in Walter Library were used, subjects were asked to indicate all areas of the library in which they had spent time during that day's visit to Walter Library by checking as many of the listed areas as were appropriate. The areas included were 1) Kerlan Collection, 2) Reserve Room, 3) Education/Psychology/Library Science Library, 4) Second Floor Lobby, 5) Learning Resources Center, 6) Music Library, 7) Art Library, 8) Library Book Stacks, 9) Archives, 10) Chemistry Library, and 11) 24-Hour Study Room.

In order to determine what materials were used in Walter Library, subjects were asked to indicate all of the materials which they had used during that day's visit to Walter Library by checking as many of the listed materials as were appropriate. The materials included were 1) scholarly journals or periodicals, 2) popular magazines, 3) newspapers, 4) reference materials, 5) books, monographs, or individual works, 6) microfilm, microfiche, or microcards, 7) phonograph records or audiotapes, 8) films, slides, or audiotapes, 9) reserve materials, 10) other materials (the subject was asked to state what other materials were used), and 11) none - the subject used the library as a place to study or spend spare time.

In order to determine what services were used in Walter Library, subjects were asked to indicate all of the services which they had used during that day's visit to Walter Library by checking as many of the listed services as were appropriate. The services included were 1) librarians' assistance, 2) computerized literature search service, 3) public-access photocopy machines, 4) photocopy service, 5) other services (the subject was

asked to state what other services were used), and 6) none - the subject used the library as a place to study or spend spare time.

Independent Variables

In order to determine the demographic characteristics of the users of Walter Library, subjects were asked to indicate their major, credit load for the current quarter, current grade point average, primary language, and age by filling in the data in the appropriate blank space for each response. For the purpose of data analysis, two of these variables, major and language, were simplified. The various majors listed by respondents were grouped into nine major categories. These categories are discussed in further detail in the Results section (see p. 19). Language was condensed into non-English (0) and English (1). Subjects were asked to check the appropriate response choice for the remaining demographic characteristics. Sex was indicated by selecting a response choice of either female (0) or male (1). Graduate assistantships were indicated by selecting a response choice of no (0) or yes (1), the yes respondents further indicating what position they currently held (Teaching Assistant, Research Assistant, Project Assistant, Teaching Associate, or Administrative Fellow). Citizenship was indicated by selecting a response choice of either American (0) or foreign (1). The campus on which most of the subject's time is spent was indicated by selecting the appropriate response choice (1 = mostly on the east bank of the Minneapolis campus, 2 = mostly on the west bank of the Minneapolis campus, 3 = evenly divided between the east and west banks of the Minneapolis campus, 4 = on the St. Paul campus, and 5 = other). Student status was indicated by selecting the appropriate response choice (1 = day school, full-time; 2 = day school, part-time; 3 = extension; 4 = day school

and extension; or 5 = other). Class was indicated by selecting the appropriate response choice (1 = freshman, 2 = sophomore, 3 = junior, 4 = senior, 5 = Master's student, 6 = Ph.D. student, 7 = adult special, and 8 = other). For the purpose of data analysis, the response choices adult special and other were eliminated as categories under the variable class. These response choices included too few subjects to conduct meaningful data analysis.

Data Collection

The survey of Walter Library's student users was conducted on May 4, 1983 during regular library hours. A Wednesday during the sixth week of the ten week long Spring Quarter was chosen in order to avoid biasing the survey results with mid-quarter or final exam periods. The day was chosen in anticipation of its being a typical day of library operations. According to figures cumulated by Walter Library's circulation staff, approximately 5000 users enter the library during a typical week-day of library operations. The vast majority of these users are students attending the University of Minnesota. Assuming a refusal rate of approximately thirty percent, it was estimated that asking every fourth person who exited the library at either of two exit gates would yield a response large enough to construct an accurate profile of Walter Library's student users.

The survey began at 8:00 A.M. and continued until closing at 9:00 P.M. Signs were posted at the first floor and basement entrance gates which informed library users that a survey was taking place that day and that upon exiting the library, certain individuals would systematically be chosen to participate in the survey. Every fourth person exiting at either the first floor or basement gates of the library was asked by a survey monitor to com-

plete a questionnaire consisting of five pages and taking approximately ten minutes to complete. Tables, chairs, and pencils were provided for the subjects' convenience and also to encourage survey participation. Those subjects who preferred to complete the questionnaire at another time were also given self-addressed, campus mail envelopes along with their questionnaires and were requested to return the completed questionnaires by Friday, May 6th. Four survey monitors, two at each exit gate, recorded how many subjects were approached, their sex, their status (student, faculty or staff, or non-University of Minnesota users), whether or not they preferred to return their questionnaire by mail, how many either refused or were ineligible to participate, and what reasons were given for negative responses.

A total of 1025 library users were approached during the survey period of which 54 were eliminated after it was determined that they were faculty or staff at the University of Minnesota, and 49 were eliminated after it was determined that they were users not in any way affiliated with the University of Minnesota. This left a total of 922 students who were approached during the survey period. Of this number, 621 completed questionnaires on the spot, 145 refused to participate, and 156 took questionnaires and campus mail envelopes with them. Twenty-five of the take-home questionnaires were completed and returned. The total sample size for the survey was 646 University of Minnesota students, which represented a seventy percent response rate.

Data Analysis

In order to test the five hypotheses presented previously in this

study, regression models were developed in which each of the dependent variables was regressed onto all of the independent variables in a stepwise fashion. Thus, 1) the number of library visits, 2) the duration of the library visit, 3) the eleven areas of the library, 4) the eleven response choices included under library materials, and 5) the six response choices included under library services, were each individually regressed onto class, major, student status, graduate assistantship, credits, grade point average, sex, citizenship, language, age, and campus on which most of the student's time is spent, in order to determine whether significant relationships existed between each of the dependent variables and the set of independent variables. The nominal level variables 1) major, 2) student status, 3) graduate assistantship, and 4) campus on which most of the student's time is spent, were each dummy coded as 0-1 variables for inclusion in the regression model. The variable language was recoded into "English" and "non-English." This created a total of thirty-one independent variables which were entered into each regression model. A total of thirty regression analyses were conducted. The dichotomous variables sex, language and citizenship are presented in the tables in Appendix IV with a parenthetical definition of each variable's "1" coded response following the variable label.

Results

Descriptive statistics for each question on the questionnaire are detailed in Appendix II, pp. 39-46, and in Appendix III, p. 47.

Demographic Characteristics

The sample for this survey consisted of 646 student users of Walter Library. The majority of respondents were male (58.8%). The mean age was 22.8. The mean number of credits carried by the students was 13.0 and the mean grade point average was 3.2. American citizens (93.7%) comprised the majority of respondents and most respondents indicated that English was their primary language (93%). The majority of the respondents were full-time day school students (80.7%) who spent most of their time on the east bank of the Minneapolis campus (73.4%). An overwhelming majority of the respondents did not hold graduate assistant positions (94.8%).

The respondents indicated a total of 147 different majors. In order to simplify data analysis, these seperate majors were grouped into nine major categories according to the University of Minnesota's school subdivisions. The breakdown of respondents by these areas was as follows:

32	(5.0%)	St. Paul Campus (Agriculture, Home Economics, Veterinary Medicine, Forestry)
45	(7.0%)	Medicine & Health Sciences
199	(30.8%)	Institute of Technology
4	(0.6%)	Law
51	(7.9%)	Management/Business
30	(4.6%)	Biological Sciences
56	(8.7%)	Education
189	(29.3%)	Liberal Arts
31	(4.8%)	Undecided
9	(1.4%)	No response

Racial background of the respondents was predominantly white (92.7%). Only 37 respondents indicated that they were one of five other racial backgrounds. As a result of these small group sizes, race was eliminated as a variable of interest for further data analysis.

The class breakdown of the respondents was as follows:

29	(4.5%)	Ph.D. student
45	(7.0%)	Master's student
159	(24.6%)	Senior
139	(21.5%)	Junior
128	(19.8%)	Sophomore
119	(18.4%)	Freshman
16	(2.5%)	Adult Special
11	(1.7%)	Other

The majority of respondents indicated that they used Walter Library three to six times per week (26.2%). Almost half of the sample population (47.9%) indicated that they used the library three times a week or more. The average visit lasted approximately two hours (20%).

The area most frequently used by respondents was the 24-Hour Study Room (26%). Consistent with this figure, the majority of respondents also indicated that they used neither library materials (47.1%) nor library services (58.8%) while visiting Walter Library, but instead used the library "as a place to study or spend some spare time." Those respondents who did use materials or services indicated class requirements (43.5%) as their main activity when utilizing library materials or services.

When asked to state why they had chosen Walter Library instead of another library, the majority of respondents indicated that Walter's location

was more convenient (70.7%).

The time at which most respondents exited Walter Library was between 10:00 A.M. and 11:00 A.M. (18%). A frequency distribution of respondents' exit times is provided in Appendix III, on p. 47.

Test of Hypothesis 1

In order to determine which demographic variables were influential in affecting the number of visits which respondents made to Walter Library within the past year, the dependent variable number of library visits was regressed[1] onto 1) class, 2) the nine majors, 3) the five categories included under student status, 4) the five graduate assistantships, 5) number of credits, 6) grade point average, 7) sex, 8) citizenship, 9) language, 10) age, and 11) the five campus locations. Out of the thirty-one demographic variables, six were significant. Those demographic variables which affected number of library visits included 1) time spent mostly on the east bank, Minneapolis campus, 2) time not spent mostly on the east & west banks, Minneapolis campus, 3) sex (male), 4) class, 5) age, and 6) number of credits. The variable, time spent mostly on the east bank, Minneapolis campus, was the most significantly correlated variable, explaining 7.0 percent of the variance. The variables, time not spent mostly on the east & west banks, Minneapolis campus, and sex (male), each explained 2.0 percent of the variance. The other three significantly correlated variables, class, age, and number of credits, each explained 1.0 percent of the variance

[1] The data were analyzed by utilizing the regression program in Norman H. Nie et. al., SPSS: Statistical Package for the Social Sciences, 2nd ed. (New York: McGraw-Hill, 1975). The F to include parameter controlling the step-wise inclusion procedures was set at $F = 3.0$, which generally assured $\alpha = .05$.

and combined with the first two variables to explain a total of 14.0 percent of the variance (see Table 1, p. 48). Although a statistically significant relationship is indicated between number of library visits and the demographic variables, the weakness of the relationship indicated limited diagnostic usefulness. It is noteworthy that although Walter Library is intended to serve specific disciplines, neither of the appropriate majors (Education or Liberal Arts) was significantly correlated with the number of library visits.

Test of Hypothesis 2

In order to determine which demographic characteristics were influential in affecting the duration of respondents' library visits, the dependent variable, duration of the library visit, was regressed onto 1) class, 2) the nine majors, 3) the five categories included under student status, 4) the five graduate assistantships, 5) number of credits, 6) grade point average, 7) sex, 8) citizenship, 9) language, 10) age, and 11) the five campus locations. Of these thirty-one independent variables, four were significant. The variables, being an Institute of Technology major, Extension student status, citizenship (foreign), and not being a Project Assistant, each explained approximately 1.0 percent of the variance for a total of 4.0 percent (see Table 2, p. 49). While statistically significant, these variables are, for all intents and purposes, diagnostically useless.

Test of Hypothesis 3

In order to determine which demographic characteristics were influential in affecting the use/nonuse of each of the eleven different areas of the library, the data measuring use/nonuse of each area were each re-

gressed onto the thirty-one independent variables previously identified. Thus, eleven multiple regression analyses (identified in the following discussion by the name of the dependent variable) were conducted. Of these, one, the use/nonuse of Archives did not yield any significant correlates (see Table 11, p. 58). Of the ten remaining significant analyses, seven resulted in total explained variation equal to or less than 6.0 percent. While statistically significant, these explained variations were so low as to be diagnostically useless. The seven regression analyses were the use/nonuse of 1) the Kerlan Collection (see Table 3, p. 50), 2) the Reserve Library (see Table 4, p. 51), 3) the Second Floor Lobby (see Table 6, p. 53), 4) the Learning Resources Center (see Table 7, p. 54), 5) the Music Library (see Table 8, p. 55), 6) the Art Library (see Table 9, p. 56), and 7) the Library Book Stacks (see Table 10, p. 57).

The remaining three statistically significant analyses resulted in higher explained variations and appear worthy of comment. The use/nonuse of the 24-Hour Study Room correlated significantly with being an Institute of Technology major, class, and being a Biological Sciences major, for a total of 9.0 percent (see Table 13, p. 60). The variable class correlated inversely with the dependent variable, thus indicating that as the respondent's class decreased, use of the 24-Hour Study Room increased. The Chemistry Library correlated significantly with being a Research Assistant, not being a Liberal Arts major, grade point average, not being an Education major, speaking a foreign language, not being a Management/Business major, not being an Undecided major, and day school, part-time student status, for a total of 12.0 percent (see Table 12, p. 59). Being a Research Assistant explained 4.0 percent of the variance. Not being a Liberal Arts major,

grade point average, and not being an Education major, together explained 5.0 percent of the variance. The remaining variables, speaking a foreign language, not being a Management/Business major, not being an Undecided major, and day school, part-time student status, together explained 3.0 percent of the variance.

The strongest statistically significant analysis was the correlation of the Education/Psychology/Library Science Library and the independent variables. The Education/Psychology/Library Science Library correlated significantly with being an Education major, being a Management/Business major, class, sex (male), and being an Administrative Fellow for a total of 21.0 percent (see Table 5, p. 52). Being an Education major explained 14.0 percent of the variance. Being a Management/Business major and class, together explained 5.0 percent of the variance. Sex (male) and being an Administrative Fellow, together explained 2.0 percent of the variance. The variable sex (male) correlated inversely with the dependent variable, thus indicating that being a female was more likely to affect the use of the Education/Psychology/Library Science Library. It should be noted that the Education/Psychology/Library Science Library was the only departmental library to have a corresponding major in the classification of majors. There were no corresponding majors for Art, Music, or Chemistry.

Test of Hypothesis 4

In order to determine which demographic characteristics were influential in affecting the use/nonuse of each of the nine specific library materials, the data measuring use/nonuse of each of the materials were each regressed onto the thirty-one independent variables previously identi-

fied. In addition, two other response choices were provided indicating that 1) other unlisted materials were used, and 2) no materials were used. Thus, eleven multiple regression analyses (identified in the following discussion by the name of the dependent variable) were conducted. Of these eleven regressions, nine resulted in total explained variation equal to or less than 7.0 percent. While statistically significant, these explained variations were so low as to be diagnostically meaningless. The nine regression analyses were the use/nomuse of 1) popular magazines (see Table 15, p. 62), 2) newspapers (see Table 16, p. 63), 3) reference materials (see Table 17, p. 64), 4) books, monographs, and individual works (see Table 18, p. 65), 5) microfilms, microfiche, and microcards (see Table 19 p. 66), 6) phonograph records and audiotapes (see Table 20, p. 67), 7) films, slides, and videotapes (see Table 21, p. 68), 8) reserve materials (see Table 22, p. 69), and 9) other unlisted materials (see Table 23, p. 70).

The remaining two statistically significant analyses resulted in higher explained variations and appear worthy of comment. The response choice indicating that no materials were used correlated significantly with not being a Liberal Arts major, not being an Education major, not being a Research Assistant, and sex (male) for a total of 11.0 percent (see Table 24, p. 71). Not being a Liberal Arts major and not being an Education major each explained 4.0 percent of the variance. Not being a Research Assistant and sex (male), together explained 3.0 percent of the variance.

The strongest statistically significant analysis was the correlation of the use/nomuse of scholarly journals and periodicals and the independent variables. Scholarly journals and periodicals correlated significantly with number of credits, class, being a Teaching Assistant, being a Research

Assistant, not being an Institute of Technology major, being an Education major, being a Teaching Associate, and being an Administrative Fellow, for a total of 16.0 percent (see Table 14, p. 61). The variable number of credits correlated inversely with the dependent variable, thus indicating that as the number of credits decreased, the use of scholarly journals and periodicals increased. Credits explained 6.0 percent of the variance. Class explained 3.0 percent of the variance. The remaining variables together explained 7.0 percent of the variation.

Test of Hypothesis 5

In order to determine which demographic characteristics were influential in affecting the use/nonuse of each of the four specific library services, the data measuring use/nonuse of each of the services were each regressed onto the thirty-one independent variables previously identified. In addition, two other response choices were provided indicating that 1) other unlisted services were used, and 2) no services were used. Thus, six multiple regression analyses (identified in the following discussion by the name of the dependent variable) were conducted. Of these six regressions, four resulted in total explained variation equal to or less than 5.0 percent. While statistically significant, these explained variations were so low as to be diagnostically meaningless. The four regression analyses were the use/nonuse of 1) the computerized literature search service (see Table 26, p. 73), 2) the public-access photocopy machines (see Table 27, p. 74), 3) the photocopy service (see Table 28, p. 75), and 4) other unlisted services (see Table 29, p. 76).

The remaining two statistically significant analyses resulted in

higher explained variations and appear worthy of comment. The use/nonuse of the librarians' assistance correlated significantly with being a Liberal Arts major, being an Education major, speaking a foreign language, being an Administrative Fellow, class, and being a Project Assistant, for a total of 8.0 percent (see Table 25, p. 72). Being a Liberal Arts major and being an Education major, together explained 5.0 percent of the variance. The remaining variables together explained 3.0 percent of the variance. The response choice indicating that no services were used correlated significantly with being an Institute of Technology major, being a Management/Business major, not being an Education major, not being a Liberal Arts major, time not spent mostly on another campus, and not being a Research Assistant, for a total of 10.0 percent (see Table 30, p. 77). Being an Institute of Technology major explained 4.0 percent of the variance. The remaining variables together explained 6.0 percent of the variance.

Summary

The purpose of this study was twofold. First, it was desirable to develop a demographic profile of the typical student user of Walter Library. This was accomplished by tabulating descriptive data cumulated by the survey. Second, it was hoped that the survey would yield information about the respondents' use/nonuse of Walter Library and the correlation of this use/nonuse with the respondents' demographic characteristics.

Five hypotheses were developed regarding respondents' use/nonuse of Walter Library. These hypotheses included:

1) The number of visits made to Walter Library within the past year is a function of class, major, student status, graduate assistantship, number of credits, grade point average, sex, citizenship, language, age, and campus on which most of the student's time is spent.

2) The duration of the visit to Walter Library is a function of class, major, student status, graduate assistantship, number of credits, grade point average, sex, citizenship, language, age, and campus on which most of the student's time is spent.

3) The use/nonuse of each specific area in Walter Library is a function of class, major, student status, graduate assistantship, number of credits, grade point average, sex, citizenship, language, age, and campus on which most of the student's time is spent.

4) The use/nonuse of specific materials in Walter Library is a function of class, major, student status, graduate assistantship, number of credits, grade point average, sex, citizenship, language, age, and campus on which most of the student's time is spent.

5) The use/nonuse of specific services in Walter Library is a function

of class, major, student status, graduate assistantship, number of credits, grade point average, sex, citizenship, language, age, and campus on which most of the student's time is spent.

Each of the above hypotheses was tested by means of a multiple regression analysis. These analyses regressed each of the dependent variables, 1) the number of library visits, 2) the duration of the library visit, 3) each of the eleven library areas, 4) each of the eleven library materials, and 5) each of the six library services, onto all of the independent variables, 1) class, 2) the nine majors, 3) the five categories included under student status, 4) the five graduate assistantships, 5) number of credits, 6) grade point average, 7) sex, 8) citizenship, 9) language, 10) age, and 11) the five campus locations. The independent variables were entered into these analyses in a step-wise fashion.

Hypothesis 1: The Correlates of Number of Library Visits

The first hypothesis, which tested the relationship of the number of library visits with the independent variables, yielded six significantly correlated demographic variables. The variable time spent mostly on the east bank, Minneapolis campus, was the most significantly correlated variable, explaining 7.0 percent of the variance. This variable conbined with time not spent mostly on the east & west banks, Minneapolis campus; sex (male); class; age; and number of credits, to explain a total of 14.0 percent of the variance. The variables class and age correlated inversely with the dependent variable, thus indicating that as the respondent's class and age decreased, the number of library visits increased. Although these independent variables correlated significantly with the dependent variable,

the relationship is weak and limited in diagnostic usefulness.

Hypothesis 2: The Correlates of Duration of the Library Visit

The second hypothesis tested the relationship of the duration of the library visit with the independent variables. Four variables, being an Institute of Technology major, Extension student status, citizenship (foreign), and not being a Project Assistant, were significantly correlated with the dependent variable. However, together these variables explained only a total of 4.0 percent of the variance, thus indicating a relationship which is limited in its diagnostic usefulness.

Hypothesis 3: The Correlates of the Use/Nonuse of Each of the Library Areas

The data measuring use/nonuse of each of the eleven library areas were each regressed onto the independent variables. No significant relationship was indicated between the independent variables and Archives. Areas which yielded statistically significant relationships equal to or less than 6.0 percent included the Kerlan Collection, the Reserve Library, the Second Floor Lobby, the Learning Resources Center, the Music Library, the Art Library, and the Library Book Stacks. These relationships are, for all intents and purposes, diagnostically useless.

The remaining three statistically significant analyses resulted in higher explained variations. The 24-Hour Study Room analysis indicated three significantly correlated variables which explained 9.0 percent of the variance. The Chemistry Library analysis indicated eight significantly correlated variables which explained 12.0 percent of the variance.

The strongest statistically significant analysis was the correlation of the Education/Psychology/Library Science Library and the independent

variables. Five of the demographic variables combined to explain a total of 21.0 percent variance. As mentioned previously, the Education/Psychology/Library Science Library was the only departmental library to have a corresponding major in the classification of majors. There were no corresponding majors for Art, Music or Chemistry.

Hypothesis 4: The Correlates of the Use/Nomuse of Each Type of Library Material

The data measuring use/nomuse of each of the eleven library materials were regressed onto the independent variables. Materials which yielded statistically significant relationships equal to or less than 7.0 percent included popular magazines; newspapers; reference materials; books, monographs, and individual works; microfilms, microfiche, and microcards; phonograph records and audiotapes; films, slides, and videotapes; reserve materials; and other unlisted materials. These relationships are, for all intents and purposes, diagnostically useless.

The remaining two statistically significant analyses resulted in higher explained variations. The analysis of no materials used indicated four significantly correlated variables which explained 11.0 percent of the variance.

The strongest statistically significant analysis was the correlation of the use/nomuse of scholarly journals and periodicals and the independent variables. Eight of the demographic variables combined to explain a total of 16.0 percent variance.

Hypothesis 5: The Correlates of the Use/Nomuse of Each Type of Library Service

The data measuring use/nomuse of each of the six library services were regressed onto the independent variables. Services which yielded statistically significant relationships totaling 5.0 percent or less included

the computerized literature search service, the public-access photocopy machines, the photocopy service, and other unlisted services. These relationships are, for all intents and purposes, diagnostically useless.

The remaining two statistically significant analyses resulted in higher explained variations. The analysis of the use/nonuse of the librarians' assistance indicated six significantly correlated variables which explained 8.0 percent of the variance. The analysis of no services used indicated six significantly correlated variables which explained 10.0 percent of the variance.

Discussion of Results

Although analysis of the survey data yielded many significant relationships among dependent and independent variables, the relationships themselves, with one exception, were statistically weak. This would indicate that although the independent variables included in the various hypotheses were related to the dependent variables, the relationships have limited diagnostic usefulness.

Only one of the tests, the use/nonuse of the Education/Psychology/Library Science Library, indicated a fairly strong relationship between the dependent variable and the significantly correlated independent variables. Not surprisingly, the highest degree of explained variance was revealed to be that provided by the variable, being an Education major. Thus, Education majors are important users to consider when discussing the use of this library area. This indicates that the materials in this library area and the appropriate users are meshing in a manner beneficial to the area's prime users and in a manner which facilitates the planning of re-

source allocation to this area.

The limitations of this study's results are apparent. Statistically significant relationships have been demonstrated among many of the variables, yet, excluding the relationship indicated between the use/nonuse of the Education/Psychology/Library Science Library and the demographic variables, these relationships are so weak that they indicate little or no diagnostic usefulness. Thus, although these five hypotheses indicated that the degree of library use and the use/nonuse of the library are affected by certain demographic characteristics, only one of the thirty relationships discussed was strong, thus leading to speculation that other variables not included in this survey are stronger indicators of the degree of library use, and the use/nonuse of the different areas, materials and services in the library by library users. In addition, this survey collected data from a group of students who were users of Walter Library on the chosen date of the survey. Since non-users were not included in the survey, these data do not give any indication of the variables related to student use/nonuse of the library in the first place.

A future survey of Walter Library should include users and non-users of the library. An additional section on the questionnaire consisting of evaluation variables could possibly prove instructional in determining whether or not another set of variables would be more enlightening in explaining library use. By including non-users as well as users of the library, and by including evaluation variables, a more detailed analysis of the use/nonuse of Walter Library could be provided for the administrators of Walter Library and for the administrators of other similar academic libraries.

_____a.m./p.m.

APPENDIX I - QUESTIONNAIRE

STUDENT USERS

The purpose of this study is to provide Walter Library with profiles of typical users of the library. The questionnaire should take approximately ten minutes to complete. The questions should be answered by either checking or filling in the appropriate response as indicated. Please answer all questions except those which you are requested to skip. Complete information is necessary for precise data analysis.

You have been chosen at random and will remain anonymous. Space is provided at the end of the questionnaire in which you may wish to write any additional comments or suggestions.

Thank you for your time and your answers.

The following questions will provide us with general background information.

1. What is your class?

____Ph.D. student
____Master's student
____Senior
____Junior
____Sophomore
____Freshman
____Adult Special
____Other

2. What is your major? _____

3. What is your current student status?

____Day school, full-time
____Day school, part-time
____Extension
____Day school and Extension
____Other

4. Do you currently hold a Graduate Assistant position?

____No (proceed to question #5)

____Yes ——————————→

Which category best describes your position?

____Teaching Assistant

____Research Assistant

____Project Assistant

____Teaching Associate

____Administrative Fellow

Which category best describes how much of your time today in Walter Library was spent in activities directly related to your responsibilities as a Graduate Assistant?

____All of your time

____Over half of your time

____Approximately half of your time

____Less than half of your time

____No time at all

If you spent any time at all on Graduate Assistant duties, what were those duties?

_____

_____

_____

5. How many credits are you carrying this quarter?

_____ credits

6. What is your current grade point average? _____

7. What is your sex?

____Female

____Male

8. Which category best describes your citizenship?

____American citizen (proceed to question #8a; do not answer question #8b)

____Foreign citizen (skip question #8a and proceed to question #8b)

8a. What is your racial background?

____American Indian ____Hispanic

____Asian ____White

____Black ____Other

8b. In what country do you hold your citizenship?_____

9. What is your primary language?_____

10. How old were you on your last birthday?

_____ years old

11. When on campus, where do you spend most of your time?

____Mostly on the east bank of the Minneapolis campus

____Mostly on the west bank of the Minneapolis campus

____Evenly divided between the east and west banks of the Minneapolis campus

____On the St. Paul campus

____Other

The following questions will provide us with information about your visit to Walter Library today.

12. Which category best describes how often you have visited Walter Library this year?

____Once a month or less ____Three to six times a week

____Two to three times a month ____Daily

____Once a week ____More than once daily

____Twice a week

13. Approximately how long did your visit to Walter Library last today?

_____hours _____minutes

14. In which areas of Walter Library did you spend some time today? Check all that apply.

____Kerlan Collection
____Reserve Room
____Education/Psychology/ Library Science Library
____Second floor lobby
____Learning Resources Center (Room 204)
____Music Library
____Art Library
____Library book stacks
____Archives
____Chemistry Library
____24-Hour Study Room

15. Please examine the following list of materials available in Walter Library and check all that you used (or borrowed) today.

____Scholarly journals or periodicals
____Popular magazines
____Newspapers
____Reference materials
____Books, monographs, or individual works
____Microfilm, microfiche, or microcards
____Phonograph records or audiotapes
____Films, slides, or videotapes
____Reserve materials
____Other, not in above list (please state):_____
____None (I used the library as a place to study or spend some spare time)

16. Please examine the following list of services available in Walter Library and check all that you used today.

____Librarians' assistance
____Computerized literature search service
____Public-access photocopy machines
____Photocopy service
____Other, not in above list (please state):_____
____None (I used the library as a place to study or spend some spare time)

17. If you used any materials and/or services provided by Walter Library, please indicate what your reasons were for using these materials and/or services. Check all that apply. (NOTE: If you checked "None" for both questions #15 and #16, you may skip this question and proceed to question #18.)

____To satisfy class requirements (such as reserve readings, term papers, oral presentations, etc.).

____To support my research (thesis or dissertation).

____To fulfill the duties of my Graduate Assistantship.

____To support my personal interests (hobbies) not related to my academic responsibilities.

____Other (please state):_____

18. Why did you choose to use Walter Library today, as opposed to another library within the University's library system. Please check all that apply.

____Walter's collection contains the materials that I needed.

____Walter's services are better.

____Walter's staff is more helpful.

____Walter's location is more convenient.

____Walter's building is more pleasant and comfortable.

____Something else not mentioned above (please state):_____

CONCLUSION

19. Thank you for providing us with the above information. Your time and effort will help us improve Walter Library for you, the user. Please feel free to write in any additional comments or suggestions in the space remaining.

APPENDIX II

Descriptive Statistics[2]

	%	n	$\bar{x}$	SD
1. CLASS:		646		
Ph.D student	4.5			
Master's student	7.0			
Senior	24.6			
Junior	21.5			
Sophomore	19.8			
Freshman	18.4			
Adult Special	2.5			
Other	1.7			
2. MAJOR:		637		
St. Paul Campus	5.0			
Medicine & Health Sciences	7.1			
Institute of Technology	31.2			
Law	0.6			
Management/Business	8.0			
Biological Sciences	4.7			
Education	8.8			
Liberal Arts	29.7			
Undecided	4.9			
3. STUDENT STATUS:		646		
Day School, full-time	80.7			
Day School, part-time	8.8			
Extension	2.5			
Day School & Extension	7.0			
Other	1.1			

[2]The numbers in the descriptive statistics table refer to the numbers used in the questionnaire. Please refer to Appendix I for the complete questionnaire.

Descriptive Statistics cont.

		%	n	$\bar{x}$	SD
4.	GRADUATE ASSISTANTSHIP:		635		
	No	94.8			
	Teaching Assistant	2.4			
	Research Assistant	1.7			
	Project Assistant	0.5			
	Teaching Associate	0.5			
	Administrative Fellow	0.2			
-	TIME SPENT ON GRADUATE ASSISTANTSHIP DUTIES:		33		
	All of your time	6.1			
	Over half of your time	3.0			
	Approximately half of your time	12.1			
	Less than half of your time	27.3			
	No time at all	51.5			
5.	CREDITS:		644	13.0	4.06
6.	GRADE POINT AVERAGE:		620	3.2	0.47
7.	SEX:		645		
	Female	41.2			
	Male	58.7			
8.	CITIZENSHIP:		638		
	American	93.7			
	Foreign	6.3			
8a.	RACE:		510		
	American Indian	0.8			
	Asian	3.7			
	Black	1.0			
	Hispanic	0.2			
	White	92.7			
	Other	1.6			

Descriptive Statistics cont.

	%	n	$\bar{x}$	SD
8b. COUNTRY:		36		
Algeria	3.0			
Brazil	6.0			
Cameroon	3.0			
Canada	3.0			
China	8.0			
Egypt	3.0			
England	3.0			
Ethiopia	3.0			
France	3.0			
Greece	8.0			
India	6.0			
Iran	8.0			
Korea	3.0			
Lebanon	3.0			
Mexico	6.0			
Nigeria	3.0			
Switzerland	6.0			
Taiwan	8.0			
Trinidad	3.0			
Viet Nam	11.0			
Yugoslavia	3.0			
9. LANGUAGE:		625		
Amahric	0.0	(1)		
American	1.0			
Arabic	0.0	(3)		
Berber	0.0	(1)		
Chinese	1.0			
English	92.0			
Farsi	0.0	(1)		
French	0.0	(1)		
German	0.0	(2)		
Greek	0.0	(3)		

Descriptive Statistics cont.

		%	n	$\bar{x}$	SD
	Hangook	0.0	(1)		
	Hungarian	0.0	(1)		
	Korean	0.0	(3)		
	Oriya	0.0	(1)		
	Phillipine	0.0	(1)		
	Portuguese	0.0	(2)		
	Russian	0.0	(1)		
	Spanish	0.0	(3)		
	Turkish	0.0	(1)		
	Urdu	0.0	(1)		
	Vietnamese	1.0			
	Yoruba	0.0	(1)		
10.	AGE:		642	22.8	5.10
11.	CAMPUS:		646		
	East bank, Minneapolis campus	73.4			
	West bank, Minneapolis campus	7.3			
	Evenly divided between East and West banks	14.2			
	St. Paul campus	3.4			
	Other	1.7			
12.	NUMBER OF VISITS:		646	4.11	1.72
	Once a month or less	9.8			
	Two to three times a month	11.8			
	Once a week	13.0			
	Twice a week	17.6			
	Three to six times a week	26.2			
	Daily	14.7			
	More than once daily	7.0			
13.	DURATION OF VISIT:		637	107.77	76.01

Descriptive Statistics cont.

	%	n	$\bar{x}$	SD
14. AREAS:		646		
Kerlan Collection				
Yes	0.9			
No	99.1			
Reserve Room				
Yes	18.9			
No	81.1			
Education/Psychology/ Library Science Library				
Yes	15.8			
No	84.2			
Second Floor Lobby				
Yes	10.8			
No	89.2			
Learning Resources Center				
Yes	19.3			
No	80.7			
Music Library				
Yes	10.7			
No	89.3			
Art Library				
Yes	18.7			
No	81.3			
Library Book Stacks				
Yes	11.5			
No	88.5			
Archives				
Yes	1.5			
No	98.5			
Chemistry Library				
Yes	8.0			
No	92.0			
24-Hour Study Room				
Yes	26.0			
No	74.0			
15. MATERIALS:		646		
Scholarly journals or periodicals				
Yes	13.9			
No	86.1			

Descriptive Statistics cont.

	%	n	$\bar{x}$	SD
Popular magazines				
Yes	5.6			
No	94.4			
Newspapers				
Yes	9.9			
No	90.1			
Reference materials				
Yes	15.6			
No	84.4			
Books, monographs, or individual works				
Yes	14.9			
No	85.1			
Microfilm, microfiche, or microcards				
Yes	2.0			
No	98.0			
Phonograph records or audiotapes				
Yes	14.1			
No	85.9			
Films, slides, or videotapes				
Yes	6.0			
No	94.0			
Reserve materials				
Yes	13.2			
No	86.8			
Other, not in above list				
Yes	4.6			
No	95.4			
None				
Yes	47.1			
No	52.9			
16. SERVICES:		646		
Librarians' assistance				
Yes	19.8			
No	80.2			
Computerized literature search service				
Yes	1.9			
No	98.1			

Descriptive Statistics cont.

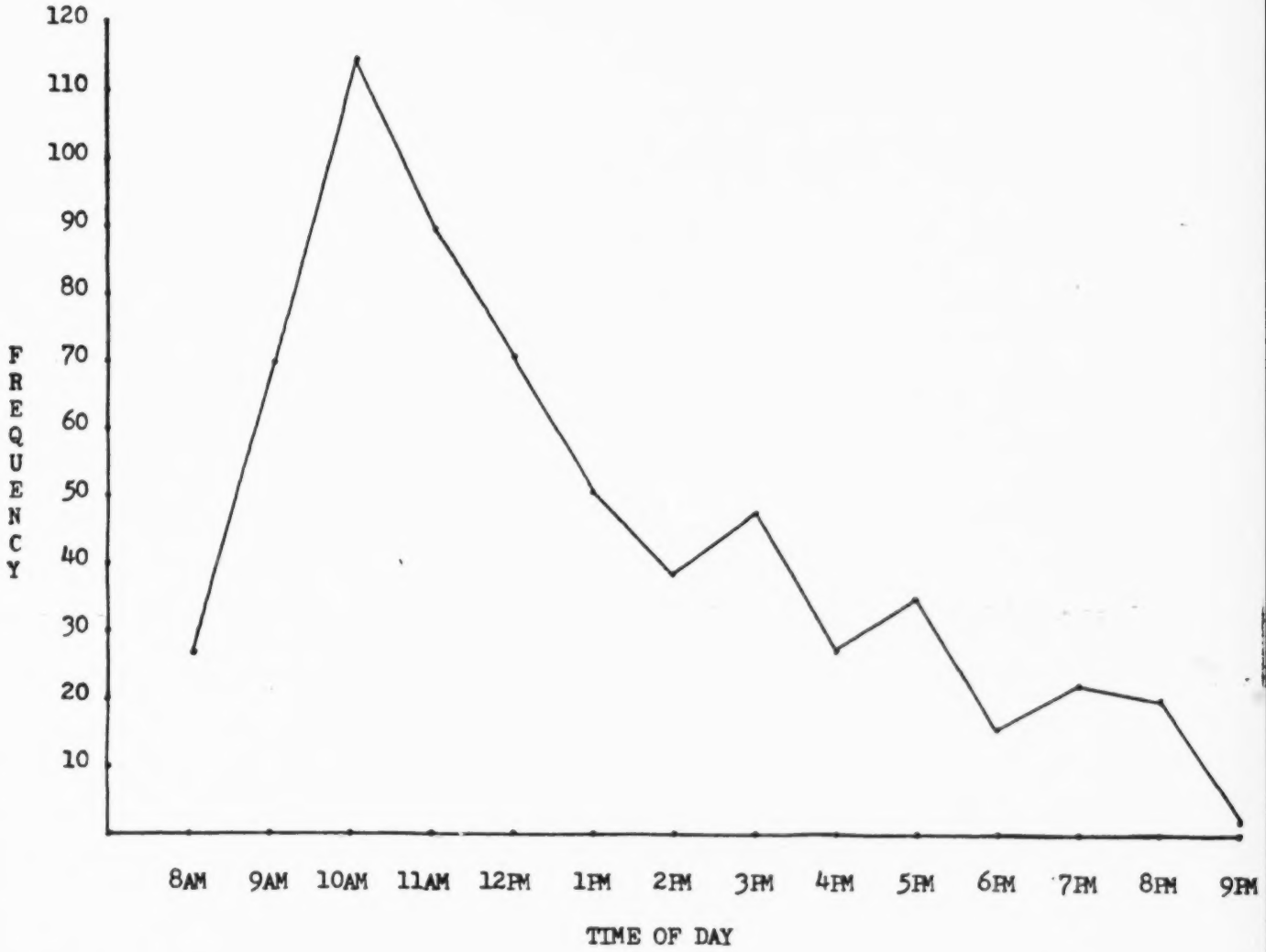
	%	n	$\bar{x}$	SD
Public-access photocopy machines				
Yes	5.4			
No	94.6			
Photocopy service				
Yes	8.2			
No	91.8			
Other, not in above list				
Yes	8.2			
No	91.8			
None				
Yes	58.8			
No	41.2			
17. ACTIVITIES:		646		
Class requirements				
Yes	43.5			
No	56.5			
Research				
Yes	11.3			
No	88.7			
Graduate Assistantship duties				
Yes	0.8			
No	99.2			
Personal interests				
Yes	13.9			
No	86.1			
Other				
Yes	4.8			
No	95.2			
18. REASONS:		646		
Walter's collection				
Yes	39.0			
No	61.0			
Walter's services				
Yes	3.3			
No	96.7			
Walter's staff				
Yes	4.5			
No	95.5			

Descriptive Statistics cont.

	%	n	$\bar{x}$	SD
Walter's location				
Yes	70.7			
No	29.3			
Walter's pleasant and comfortable surroundings				
Yes	26.6			
No	73.4			
Something else not mentioned above				
Yes	10.1			
No	89.9			

APPENDIX III

FREQUENCY DISTRIBUTION OF THE TIME AT WHICH RESPONDENTS EXITED WALTER LIBRARY



APPENDIX IV

TABLE 1

MULTIPLE REGRESSION ANALYSIS OF THE NUMBER OF LIBRARY VISITS ONTO THE DEMOGRAPHIC VARIABLES
(n = 569)

	R	R^2	r
Time spent mostly on the east bank, Minneapolis campus	.26	.07	.26
Time spent mostly on the east & west banks, Minneapolis campus	.30	.09	-.06
Sex (male)	.33	.11	.13
Class	.34	.12	-.15
Age	.36	.13	-.01
Number of credits	.37	.14	.11
Non-significant variables			
Biological Sciences majors			.06
St. Paul Campus majors			-.10
Medicine & Health Sciences majors			-.03
Institute of Technology majors			.18
Law majors			.04
Management/Business majors			-.01
Education majors			-.06
Liberal Arts majors			-.10
Undecided majors			-.02
Day school, full-time student status			.06
Day school, part-time student status			-.04
Extension student status			.01
Day school & Extension student status			-.03
Other student status			-.04
Teaching Assistant			-.08
Research Assistant			-.10
Project Assistant			-.02
Teaching Associate			.01
Administrative Fellow			-.05
Grade point average			-.03
Citizenship (foreign)			.02
Language (English)			-.05
Time spent mostly on the west bank, Minneapolis campus			-.20
Time spent mostly on the St. Paul campus			-.18
Time spent mostly on another campus			-.07

TABLE 2

MULTIPLE REGRESSION ANALYSIS OF THE DURATION OF LIBRARY VISIT ONTO THE DEMOGRAPHIC VARIABLES
(n = 560)

	R	R^2	r
Institute of Technology majors	.11	.01	.11
Extension student status	.15	.02	.10
Citizenship (foreign)	.18	.03	.10
Project Assistant	.20	.04	-.09
Non-significant variables			
Class			.01
St. Paul Campus majors			-.01
Medicine & Health Sciences majors			-.03
Law majors			.04
Management/Business majors			-.02
Biological Sciences majors			-.05
Education majors			.04
Liberal Arts majors			-.04
Undecided majors			-.08
Day school, full-time student status			-.00
Day school, part-time student status			-.03
Day school & Extension student status			.03
Other student status			-.10
Teaching Assistant			-.06
Research Assistant			-.02
Teaching Associate			.07
Administrative Fellow			.04
Number of credits			.06
Grade point average			-.03
Sex (male)			.04
Language (English)			-.07
Age			.06
Time spent mostly on the east bank, Minneapolis campus			.07
Time spent mostly on the west bank, Minneapolis campus			-.04
Time spent mostly on the east & west banks, Minneapolis campus			-.03
Time spent mostly on the St. Paul campus			-.05
Time spent mostly on another campus			-.04

TABLE 3

MULTIPLE REGRESSION ANALYSIS OF THE USE/NONUSE OF THE KERLAN COLLECTION ONTO THE DEMOGRAPHIC VARIABLES
(n = 560)

	R	R^2	r
Education majors	.18	.03	.18
Day school, part-time student status	.20	.04	.10
Number of credits	.24	.06	.04
Non-significant variables			
Age			.10
Undecided majors			.07
Class			.03
St. Paul Campus majors			-.02
Medicine & Health Sciences majors			-.03
Institute of Technology majors			-.06
Law majors			-.01
Management/Business majors			-.03
Biological Sciences majors			-.02
Liberal Arts majors			-.02
Day school, full-time student status			-.05
Extension student status			-.01
Day school & Extension student status			-.03
Other student status			-.01
Teaching Assistant			-.01
Research Assistant			-.01
Project Assistant			-.01
Teaching Associate			-.01
Administrative Fellow			-.00
Grade point average			.08
Sex (male)			-.04
Citizenship (foreign)			-.02
Language (English)			.02
Time spent mostly on the east bank, Minneapolis campus			.01
Time spent mostly on the west bank, Minneapolis campus			-.03
Time spent mostly on the east & west banks, Minneapolis campus			.01
Time spent mostly on the St. Paul campus			-.02
Time spent mostly on another campus			-.01

TABLE 4

MULTIPLE REGRESSION ANALYSIS OF THE USE/NONUSE OF THE RESERVE LIBRARY ONTO THE DEMOGRAPHIC VARIABLES
(n = 560)

	R	R^2	r
Day school, part-time student status	.12	.01	-.12
Sex (male)	.16	.02	-.10
Non-significant variables			
Class			.04
St. Paul Campus majors			.03
Medicine & Health Sciences majors			-.00
Institute of Technology majors			-.08
Law majors			.03
Management/Business majors			.05
Biological Sciences majors			.05
Education majors			.02
Liberal Arts majors			-.01
Undecided majors			.02
Day school, full-time student status			.04
Extension student status			.01
Day school & Extension student status			.06
Other student status			.01
Teaching Assistant			-.07
Research Assistant			-.02
Project Assistant			-.04
Teaching Associate			-.04
Administrative Fellow			-.02
Number of credits			.10
Grade point average			-.01
Citizenship (foreign)			.00
Language (English)			.01
Age			-.00
Time spent mostly on the east bank, Minneapolis campus			.03
Time spent mostly on the west bank, Minneapolis campus			-.01
Time spent mostly on the east & west banks, Minneapolis campus			-.05
Time spent mostly on the St. Paul campus			.03
Time spent mostly on another campus			.02

TABLE 5

MULTIPLE REGRESSION ANALYSIS OF THE USE/NONUSE OF THE EDUCATION/PSYCHOLOGY/ LIBRARY SCIENCE LIBRARY ONTO THE DEMOGRAPHIC VARIABLES
(n = 560)

	R	R^2	r
Education majors	.38	.14	.38
Management/Business majors	.41	.16	.12
Class	.43	.19	.25
Sex (male)	.44	.20	-.16
Administrative Fellow	.45	.21	.10
Non-significant variables			
St. Paul Campus majors			.01
Medicine & Health Sciences majors			-.04
Institute of Technology majors			-.20
Law majors			.03
Biological Sciences majors			-.06
Liberal Arts majors			-.03
Undecided majors			-.07
Day school, full-time student status			-.04
Day school, part-time student status			.07
Extension student status			-.02
Day school & Extension student status			-.04
Other student status			.08
Teaching Assistant			.03
Research Assistant			.07
Project Assistant			.03
Teaching Associate			.03
Number of credits			-.20
Grade point average			.14
Citizenship (foreign)			.02
Language (English)			-.03
Age			.24
Time spent mostly on the east bank, Minneapolis campus			.02
Time spent mostly on the west bank, Minneapolis campus			-.01
Time spent mostly on the east & west banks, Minneapolis campus			-.03
Time spent mostly on the St. Paul campus			.03
Time spent mostly on another campus			-.01

TABLE 6

MULTIPLE REGRESSION ANALYSIS OF THE USE/NONUSE OF THE SECOND FLOOR LOBBY ONTO THE DEMOGRAPHIC VARIABLES
(n = 560)

	R	R^2	r
Other student status	.10	.01	.10
Education majors	.13	.02	.10
Liberal Arts majors	.16	.03	.08
Class	.18	.03	-.01
Language (English)	.20	.04	-.07
Non-significant variables			
St. Paul Campus majors			-.00
Medicine & Health Sciences majors			-.05
Institute of Technology majors			-.04
Law majors			-.03
Management/Business majors			-.02
Biological Sciences majors			-.03
Undecided majors			-.05
Day school, full-time student status			.02
Day school, part-time student status			.01
Extension student status			-.00
Day school & Extension student status			-.08
Teaching Assistant			.02
Research Assistant			-.04
Project Assistant			-.03
Teaching Associate			-.03
Administrative Fellow			-.02
Number of credits			-.01
Grade point average			.06
Sex (male)			.01
Citizenship (foreign)			.04
Age			.01
Time spent mostly on the east bank, Minneapolis campus			-.02
Time spent mostly on the west bank, Minneapolis campus			.03
Time spent mostly on the east & west banks, Minneapolis campus			.01
Time spent mostly on the St. Paul campus			.03
Time spent mostly on another campus			-.04

TABLE 7

MULTIPLE REGRESSION ANALYSIS OF THE USE/NONUSE OF THE LEARNING RESOURCES CENTER ONTO THE DEMOGRAPHIC VARIABLES
(n = 560)

	R	R^2	r
Liberal Arts majors	.16	.03	.16
Age	.20	.04	-.10
St. Paul Campus majors	.22	.05	-.11
Non-significant variables			
Biological Sciences majors			.07
Class			-.04
Medicine & Health Sciences majors			-.02
Institute of Technology majors			-.04
Law majors			-.04
Management/Business majors			-.03
Education majors			-.13
Undecided majors			.02
Day school, full-time student status			.05
Day school, part-time student status			-.04
Extension student status			.01
Day school & Extension student status			-.03
Other student status			-.04
Teaching Assistant			-.01
Research Assistant			-.06
Project Assistant			.03
Teaching Associate			.03
Administrative Fellow			-.02
Number of credits			.06
Grade point average			-.03
Sex (male)			-.01
Citizenship (foreign)			-.02
Language (English)			.05
Time spent mostly on the east bank, Minneapolis campus			-.02
Time spent mostly on the west bank, Minneapolis campus			.04
Time spent mostly on the east & west banks, Minneapolis campus			.03
Time spent mostly on the St. Paul campus			-.07
Time spent mostly on another campus			.02

TABLE 8

MULTIPLE REGRESSION ANALYSIS OF THE USE/NONUSE OF THE MUSIC LIBRARY ONTO THE DEMOGRAPHIC VARIABLES
(n = 560)

	R	R^2	r
Grade point average	.12	.01	.12
Time spent mostly on the east & west banks, Minneapolis campus	.17	.03	.12
St. Paul Campus majors	.20	.04	.08
Non-significant variables			
Class			-.03
Medicine & Health Sciences majors			.00
Institute of Technology majors			-.09
Law majors			-.03
Management/Business majors			-.04
Biological Sciences majors			-.00
Education majors			.02
Liberal Arts majors			.10
Undecided majors			-.08
Day school, full-time student status			-.02
Day school, part-time student status			-.00
Extension student status			.05
Day school & Extension student status			.02
Other student status			-.03
Teaching Assistant			-.01
Research Assistant			-.04
Project Assistant			-.03
Teaching Associate			-.03
Administrative Fellow			-.01
Number of credits			.07
Sex (male)			-.04
Citizenship (foreign)			.04
Language (English)			-.06
Age			.02
Time spent mostly on the east bank, Minneapolis campus			-.06
Time spent mostly on the west bank, Minneapolis campus			-.07
Time spent mostly on the St. Paul campus			.06
Time spent mostly on another campus			-.04

TABLE 9

MULTIPLE REGRESSION ANALYSIS OF THE USE/NONUSE OF THE ART LIBRARY ONTO THE DEMOGRAPHIC VARIABLES
(n = 560)

	R	R^2	r
Liberal Arts majors	.15	.02	.15
Teaching Associate	.17	.03	.09
Non-significant variables			
Education majors			-.10
Class			.01
St. Paul Campus majors			.04
Medicine & Health Sciences majors			-.00
Institute of Technology majors			-.02
Law majors			-.04
Management/Business majors			-.08
Biological Sciences majors			-.03
Undecided majors			-.04
Day school, full-time student status			.06
Day school, part-time student status			-.07
Extension student status			.01
Day school & Extension student status			-.01
Other student status			-.04
Teaching Assistant			.05
Research Assistant			-.06
Project Assistant			-.04
Administrative Fellow			-.02
Number of credits			.04
Grade point average			.02
Sex (male)			-.01
Citizenship (foreign)			.00
Language (English)			.03
Age			-.04
Time spent mostly on the east bank, Minneapolis campus			-.08
Time spent mostly on the west bank, Minneapolis campus			.07
Time spent mostly on the east & west banks, Minneapolis campus			.07
Time spent mostly on the St. Paul campus			-.04
Time spent mostly on another campus			-.02

TABLE 10

MULTIPLE REGRESSION ANALYSIS OF THE USE/NONUSE OF THE LIBRARY BOOK STACKS ONTO THE DEMOGRAPHIC VARIABLES
(n = 560)

	R	R^2	r
Administrative Fellow	.12	.01	.12
Non-significant variables			
Class			.01
St. Paul Campus majors			-.03
Medicine & Health Sciences majors			.02
Institute of Technology majors			.01
Law majors			-.03
Management/Business majors			-.03
Biological Sciences majors			.01
Education majors			-.03
Liberal Arts majors			.05
Undecided majors			-.05
Day school, full-time student status			.05
Day school, part-time student status			-.01
Extension student status			-.05
Day school & Extension student status			-.03
Other student status			-.03
Teaching Assistant			.02
Research Assistant			.00
Project Assistant			-.03
Teaching Associate			-.03
Number of credits			.05
Grade point average			-.02
Sex (male)			-.03
Citizenship (foreign)			-.04
Language (English)			.05
Age			.01
Time spent mostly on the east bank, Minneapolis campus			.00
Time spent mostly on the west bank, Minneapolis campus			-.04
Time spent mostly on the east & west banks, Minneapolis campus			.04
Time spent mostly on the St. Paul campus			-.04
Time spent mostly on another campus			.00

TABLE 11

MULTIPLE REGRESSION ANALYSIS OF THE USE/NONUSE OF THE ARCHIVES ONTO THE DEMOGRAPHIC VARIABLES
(n = 560)

	R	R^2	r
Non-significant variables			
Class			.00
St. Paul Campus majors			-.03
Medicine & Health Sciences majors			.02
Institute of Technology majors			.01
Law majors			-.01
Management/Business majors			.01
Biological Sciences majors			-.03
Education majors			-.04
Liberal Arts majors			.04
Undecided majors			-.03
Day school, full-time student status			-.01
Day school, part-time student status			.01
Extension student status			-.02
Day school & Extension student status			.02
Other student status			-.01
Teaching Assistant			-.02
Research Assistant			-.02
Project Assistant			-.01
Teaching Associate			-.01
Administrative Fellow			-.01
Number of credits			.04
Grade point average			.01
Sex (male)			.02
Citizenship (foreign)			-.03
Language (English)			.03
Age			-.04
Time spent mostly on the east bank, Minneapolis campus			-.05
Time spent mostly on the west bank, Minneapolis campus			.02
Time spent mostly on the east & west banks, Minneapolis campus			.07
Time spent mostly on the St. Paul campus			-.02
Time spent mostly on another campus			-.02

TABLE 12

MULTIPLE REGRESSION ANALYSIS OF THE USE/NONUSE OF THE CHEMISTRY LIBRARY ONTO THE DEMOGRAPHIC VARIABLES
(n = 560)

	R	R^2	r
Research Assistant	.20	.04	.20
Liberal Arts majors	.24	.06	-.15
Grade point average	.27	.07	.12
Education majors	.30	.09	-.06
Language (English)	.32	.10	-.15
Management/Business majors	.33	.11	-.03
Undecided majors	.34	.12	-.06
Day school, part-time student status	.35	.12	.08
Non-significant variables			
Other student status			.06
Citizenship (foreign)			.08
Class			.07
St. Paul Campus majors			.09
Medicine & Health Sciences majors			.09
Institute of Technology majors			.11
Law majors			-.02
Biological Sciences majors			.09
Day school, full-time student status			-.05
Extension student status			-.04
Day school & Extension student status			-.02
Teaching Assistant			.05
Project Assistant			-.02
Teaching Associate			-.02
Administrative Fellow			-.01
Number of credits			-.08
Sex (male)			.05
Age			.06
Time spent mostly on the east bank, Minneapolis campus			.05
Time spent mostly on the west bank, Minneapolis campus			-.03
Time spent mostly on the east & west banks, Minneapolis campus			-.08
Time spent mostly on the St. Paul campus			.10
Time spent mostly on another campus			-.03

TABLE 13

MULTIPLE REGRESSION ANALYSIS OF THE USE/NONUSE OF THE 24-HOUR STUDY ROOM ONTO THE DEMOGRAPHIC VARIABLES
(n = 560)

	R	R^2	r
Institute of Technology majors	.23	.06	.23
Class	.28	.08	-.19
Biological Sciences majors	.29	.09	.07
Non-significant variables			
Grade point average			-.15
Law majors			.06
St. Paul Campus majors			-.07
Medicine & Health Sciences majors			-.04
Management/Business majors			-.02
Education majors			-.13
Liberal Arts majors			-.15
Undecided majors			.04
Day school, full-time student status			.05
Day school, part-time student status			-.06
Extension student status			.02
Day school & Extension student status			.00
Other student status			-.05
Teaching Assistant			-.07
Research Assistant			-.04
Project Assistant			-.05
Teaching Associate			-.05
Administrative Fellow			-.03
Number of credits			.07
Sex (male)			.09
Citizenship (foreign)			-.01
Language (English)			-.01
Age			-.14
Time spent mostly on the east bank, Minneapolis campus			.09
Time spent mostly on the west bank, Minneapolis campus			-.07
Time spent mostly on the east & west banks, Minneapolis campus			-.02
Time spent mostly on the St. Paul campus			-.07
Time spent mostly on another campus			-.04

TABLE 14

MULTIPLE REGRESSION ANALYSIS OF THE USE/NONUSE OF SCHOLARLY JOURNALS AND PERIODICALS ONTO THE DEMOGRAPHIC VARIABLES
(n = 560)

	R	R^2	r
Number of credits	.25	.06	-.25
Class	.30	.09	.25
Teaching Assistant	.33	.11	.20
Research Assistant	.35	.13	.20
Institute of Technology majors	.37	.14	-.16
Education majors	.38	.15	.20
Teaching Associate	.39	.15	.11
Administrative Fellow	.40	.16	.10
Non-significant variables			
Time spent mostly on the east & west banks, Minneapolis campus			.07
Sex (male)			-.14
St. Paul Campus majors			-.00
Medicine & Health Sciences majors			.01
Law majors			-.03
Management/Business majors			.00
Biological Sciences majors			-.03
Liberal Arts majors			.09
Undecided majors			-.07
Day school, full-time student status			-.09
Day school, part-time student status			.14
Extension student status			.07
Day school & Extension student status			-.05
Other student status			.02
Project Assistant			.04
Grade point average			.15
Citizenship (foreign)			.12
Language (English)			-.10
Age			.22
Time spent mostly on the east bank, Minneapolis campus			-.10
Time spent mostly on the west bank, Minneapolis campus			.06
Time spent mostly on the St. Paul campus			.06
Time spent mostly on another campus			-.05

TABLE 15

MULTIPLE REGRESSION ANALYSIS OF THE USE/NONUSE OF POPULAR MAGAZINES ONTO THE DEMOGRAPHIC VARIABLES
(n = 560)

	R	R^2	r
Language (English)	.15	.02	-.15
Citizenship (foreign)	.20	.04	.04
Time spent mostly on the east & west banks, Minneapolis campus	.23	.05	.13
Non-significant variables			
Day school & Extension student status			-.07
Class			-.06
St. Paul Campus majors			-.02
Medicine & Health Sciences majors			.03
Institute of Technology majors			-.02
Law majors			-.02
Management/Business majors			-.02
Biological Sciences majors			.01
Education majors			.01
Liberal Arts majors			.04
Undecided majors			-.02
Day school, full-time student status			-.00
Day school, part-time student status			.03
Extension student status			.09
Other student status			-.02
Teaching Assistant			.01
Research Assistant			-.03
Project Assistant			-.02
Teaching Associate			-.02
Administrative Fellow			-.01
Number of credits			.02
Grade point average			-.05
Sex (male)			.02
Age			-.04
Time spent mostly on the east bank, Minneapolis campus			-.09
Time spent mostly on the west bank, Minneapolis campus			-.01
Time spent mostly on the St. Paul campus			-.01
Time spent mostly on another campus			-.03

TABLE 16

MULTIPLE REGRESSION ANALYSIS OF THE USE/NONUSE OF NEWSPAPERS ONTO THE DEMOGRAPHIC VARIABLES
(n = 560)

	R	R^2	r
Language (English)	.13	.02	-.13
Administrative Fellow	.18	.03	.13
Sex (male)	.22	.05	.11
Time spent mostly on the east & west banks, Minneapolis campus	.25	.06	.11
Non-significant variables			
Institute of Technology majors			.09
Class			.02
St. Paul Campus majors			.00
Medicine & Health Sciences majors			.03
Law majors			-.02
Management/Business majors			-.04
Biological Sciences majors			-.00
Education majors			-.04
Liberal Arts majors			-.04
Undecided majors			-.05
Day school, full-time student status			-.06
Day school, part-time student status			.06
Extension student status			.05
Day school & Extension student status			-.02
Other student status			.04
Teaching Assistant			-.01
Research Assistant			.01
Project Assistant			-.02
Teaching Associate			-.02
Number of credits			-.01
Grade point average			-.01
Citizenship (foreign)			.10
Age			.02
Time spent mostly on the east bank, Minneapolis campus			-.04
Time spent mostly on the west bank, Minneapolis campus			-.05
Time spent mostly on the St. Paul campus			-.03
Time spent mostly on another campus			-.04

TABLE 17

MULTIPLE REGRESSION ANALYSIS OF THE USE/NONUSE OF REFERENCE MATERIALS ONTO THE DEMOGRAPHIC VARIABLES
(n = 560)

	R	R^2	r
Education majors	.19	.04	.19
Liberal Arts majors	.21	.05	.07
Citizenship (foreign)	.23	.05	.09
Non-significant variables			
Class			.10
St. Paul Campus majors			-.01
Medicine & Health Sciences majors			.02
Institute of Technology majors			-.11
Law majors			-.03
Management/Business majors			-.04
Biological Sciences majors			-.04
Undecided majors			-.05
Day school, full-time student status			-.01
Day school, part-time student status			.06
Extension student status			-.06
Day school & Extension student status			-.04
Other student status			.08
Teaching Assistant			.03
Research Assistant			.03
Project Assistant			.04
Teaching Associate			-.03
Administrative Fellow			-.02
Number of credits			-.11
Grade point average			.05
Sex (male)			-.09
Language (English)			-.05
Age			.10
Time spent mostly on the east bank, Minneapolis campus			-.06
Time spent mostly on the west bank, Minneapolis campus			-.01
Time spent mostly on the east & west banks, Minneapolis campus			.06
Time spent mostly on the St. Paul campus			.00
Time spent mostly on another campus			.07

TABLE 18

MULTIPLE REGRESSION ANALYSIS OF THE USE/NONUSE OF BOOKS, MONOGRAPHS, AND INDIVIDUAL WORKS ONTO THE DEMOGRAPHIC VARIABLES
(n = 560)

	R	R^2	r
Age	.14	.02	.14
Sex (male)	.20	.04	-.14
Liberal Arts majors	.22	.05	.14
Non-significant variables			
Education majors			.11
Time spent mostly on the west bank, Minneapolis campus			.10
Class			.10
St. Paul Campus majors			.05
Medicine & Health Sciences majors			-.03
Institute of Technology majors			-.11
Law majors			-.03
Management/Business majors			-.07
Biological Sciences majors			-.03
Undecided majors			-.09
Day school, full-time student status			-.07
Day school, part-time student status			.03
Extension student status			.07
Day school & Extension student status			.03
Other student status			.03
Teaching Assistant			.07
Research Assistant			.08
Project Assistant			.04
Teaching Associate			-.03
Administrative Fellow			-.02
Number of credits			-.07
Grade point average			.11
Citizenship (foreign)			.01
Language (English)			-.06
Time spent mostly on the east bank, Minneapolis campus			-.08
Time spent mostly on the east & west banks, Minneapolis campus			.02
Time spent mostly on the St. Paul campus			.01
Time spent mostly on another campus			.04

TABLE 19

MULTIPLE REGRESSION ANALYSIS OF THE USE/NONUSE OF MICROFILMS, MICROFICHE, AND MICROCARDS ONTO THE DEMOGRAPHIC VARIABLES
(n = 560)

	R	R^2	r
Project Assistant	.16	.02	.16
Time spent mostly on the east & west banks, Minneapolis campus	.21	.05	.15
Language (English)	.24	.06	-.11
Day school, part-time student status	.26	.07	.09
Non-significant variables			
Biological Sciences majors			.07
Class			.01
St. Paul Campus majors			-.03
Medicine & Health Sciences majors			.01
Institute of Technology majors			-.07
Law majors			-.01
Management/Business majors			.00
Education majors			.04
Liberal Arts majors			.04
Undecided majors			-.03
Day school, full-time student status			-.03
Extension student status			-.02
Day school & Extension student status			-.04
Other student status			-.01
Teaching Assistant			.06
Research Assistant			-.02
Teaching Associate			-.01
Administrative Fellow			-.01
Number of credits			-.10
Grade point average			.08
Sex (male)			.02
Citizenship (foreign)			.13
Age			.00
Time spent mostly on the east bank, Minneapolis campus			-.11
Time spent mostly on the west bank, Minneapolis campus			.01
Time spent mostly on the St. Paul campus			-.03
Time spent mostly on another campus			-.02

TABLE 20

MULTIPLE REGRESSION ANALYSIS OF THE USE/NONUSE OF PHONOGRAPH RECORDS AND AUDIOTAPES ONTO THE DEMOGRAPHIC VARIABLES
(n = 560)

	R	R^2	r
Liberal Arts majors	.17	.03	.17
Number of credits	.20	.04	.10
Non-significant variables			
Class			-.07
Grade point average			.08
St. Paul Campus majors			-.07
Medicine & Health Sciences majors			-.00
Institute of Technology majors			-.10
Law majors			-.03
Management/Business majors			-.06
Biological Sciences majors			.04
Education majors			-.01
Undecided majors			-.02
Day school, full-time student status			.08
Day school, part-time student status			-.09
Extension student status			-.01
Day school & Extension student status			-.01
Other student status			-.03
Teaching Assistant			-.06
Research Assistant			-.05
Project Assistant			-.03
Teaching Associate			-.03
Administrative Fellow			-.02
Sex (male)			-.07
Citizenship (foreign)			-.05
Language (English)			.04
Age			-.06
Time spent mostly on the east bank, Minneapolis campus			.01
Time spent mostly on the west bank, Minneapolis campus			-.01
Time spent mostly on the east & west banks, Minneapolis campus			.01
Time spent mostly on the St. Paul campus			-.05
Time spent mostly on another campus			.04

TABLE 21

MULTIPLE REGRESSION ANALYSIS OF THE USE/NONUSE OF FILMS, SLIDES, AND VIDEOTAPES ONTO THE DEMOGRAPHIC VARIABLES
(n = 560)

	R	R^2	r
Day school, full-time student status	.09	.01	.09
Sex (male)	.13	.02	.09
Time spent mostly on the east bank, Minneapolis campus	.15	.02	-.08
Non-significant variables			
Institute of Technology majors			.07
Class			-.07
St. Paul Campus majors			-.02
Medicine & Health Sciences majors			-.03
Law majors			-.02
Management/Business majors			-.02
Biological Sciences majors			-.02
Education majors			-.05
Liberal Arts majors			-.00
Undecided majors			.02
Day school, part-time student status			-.05
Extension student status			-.03
Day school & Extension student status			-.07
Other student status			-.02
Teaching Assistant			-.04
Research Assistant			.04
Project Assistant			-.02
Teaching Associate			-.02
Administrative Fellow			-.01
Number of credits			.06
Grade point average			-.06
Citizenship (foreign)			.04
Language (English)			-.03
Age			-.07
Time spent mostly on the west bank, Minneapolis campus			.05
Time spent mostly on the east & west banks, Minneapolis campus			.05
Time spent mostly on the St. Paul campus			.04
Time spent mostly on another campus			-.03

TABLE 22

MULTIPLE REGRESSION ANALYSIS OF THE USE/NONUSE OF RESERVE MATERIALS ONTO THE DEMOGRAPHIC VARIABLES
(n = 560)

	R	R^2	r
Education majors	.19	.03	.19
Liberal Arts majors	.22	.05	.08
Sex (male)	.24	.06	-.14
Non-significant variables			
Class			.10
St. Paul Campus majors			.03
Medicine & Health Sciences majors			-.04
Institute of Technology majors			-.15
Law majors			.04
Management/Business majors			-.06
Biological Sciences majors			.02
Undecided majors			-.06
Day school, full-time student status			-.05
Day school, part-time student status			.05
Extension student status			-.05
Day school & Extension student status			.04
Other student status			.03
Teaching Assistant			.01
Research Assistant			-.00
Project Assistant			.04
Teaching Associate			.04
Administrative Fellow			-.02
Number of credits			-.06
Grade point average			.05
Citizenship (foreign)			.04
Language (English)			-.05
Age			.11
Time spent mostly on the east bank, Minneapolis campus			-.07
Time spent mostly on the west bank, Minneapolis campus			.03
Time spent mostly on the east & west banks, Minneapolis campus			.06
Time spent mostly on the St. Paul campus			.01
Time spent mostly on another campus			-.00

TABLE 23

MULTIPLE REGRESSION ANALYSIS OF THE USE/NONUSE OF OTHER UNLISTED MATERIALS ONTO THE DEMOGRAPHIC VARIABLES
(n = 560)

	R	R^2	r
Project Assistant	.10	.01	.10
Teaching Associate	.14	.02	.10
Non-significant variables			
Sex (male)			-.08
Teaching Assistant			.08
Day school & Extension student status			.07
Class			.08
St. Paul Campus majors			-.05
Medicine & Health Sciences majors			.01
Institute of Technology majors			-.08
Law majors			-.02
Management/Business majors			.02
Biological Sciences majors			.02
Education majors			.02
Liberal Arts majors			.07
Undecided majors			-.01
Day school, full-time student status			-.02
Day school, part-time student status			-.01
Extension student status			-.03
Other student status			-.02
Research Assistant			.04
Administrative Fellow			-.01
Number of credits			-.03
Grade point average			.01
Citizenship (foreign)			.02
Language (English)			.02
Age			-.01
Time spent mostly on the east bank, Minneapolis campus			.00
Time spent mostly on the west bank, Minneapolis campus			.00
Time spent mostly on the east & west banks, Minneapolis campus			.00
Time spent mostly on the St. Paul campus			-.04
Time spent mostly on another campus			.04

TABLE 24

MULTIPLE REGRESSION ANALYSIS OF THE USE/NONUSE OF NO MATERIALS ONTO THE DEMOGRAPHIC VARIABLES
(n = 560)

	R	R^2	r
Liberal Arts majors	.19	.04	-.19
Education majors	.29	.08	-.17
Research Assistant	.31	.09	-.11
Sex (male)	.32	.11	.16
Non-significant variables			
Time spent mostly on another campus			-.05
Class			-.19
St. Paul Campus majors			.03
Medicine & Health Sciences majors			.02
Institute of Technology majors			.19
Law majors			.03
Management/Business majors			.11
Biological Sciences majors			.01
Undecided majors			.04
Day school, full-time student status			.05
Day school, part-time student status			-.04
Extension student status			-.04
Day school & Extension student status			-.01
Other student status			.00
Teaching Assistant			-.08
Project Assistant			-.02
Teaching Associate			-.02
Administrative Fellow			-.04
Number of credits			.12
Grade point average			-.14
Citizenship (foreign)			-.06
Language (English)			.04
Age			-.15
Time spent mostly on the east bank, Minneapolis campus			.09
Time spent mostly on the west bank, Minneapolis campus			-.03
Time spent mostly on the east & west banks, Minneapolis campus			-.06
Time spent mostly on the St. Paul campus			-.02

TABLE 25

MULTIPLE REGRESSION ANALYSIS OF THE USE/NONUSE OF THE LIBRARIANS' ASSISTANCE ONTO THE DEMOGRAPHIC VARIABLES
(n = 560)

	R	R^2	r
Liberal Arts majors	.14	.02	.14
Education majors	.22	.05	.14
Language (English)	.25	.06	-.11
Administrative Fellow	.26	.07	.09
Class	.28	.08	.05
Project Assistant	.29	.08	.09
Non-significant variables			
Time spent mostly on another campus			.06
Research Assistant			.10
St. Paul Campus majors			-.00
Medicine & Health Sciences majors			-.05
Institute of Technology majors			-.14
Law majors			-.03
Management/Business majors			-.04
Biological Sciences majors			-.01
Undecided majors			-.04
Day school, full-time student status			-.02
Day school, part-time student status			.03
Extension student status			.01
Day school & Extension student status			-.02
Other student status			.01
Teaching Assistant			-.01
Teaching Associate			.03
Number of credits			-.03
Grade point average			.02
Sex (male)			-.13
Age			.07
Time spent mostly on the east bank, Minneapolis campus			-.09
Time spent mostly on the west bank, Minneapolis campus			.03
Time spent mostly on the east & west banks, Minneapolis campus			.05
Time spent mostly on the St. Paul campus			.04
Citizenship (foreign)			.11

TABLE 26

MULTIPLE REGRESSION ANALYSIS OF THE USE/NONUSE OF THE COMPUTERIZED LITERATURE SEARCH SERVICE ONTO THE DEMOGRAPHIC VARIABLES
(n = 560)

	R	R^2	r
Project Assistant	.19	.03	.19
Biological Sciences majors	.21	.04	.10
Age	.23	.05	.10
Non-significant variables			
Other student status			-.01
Class			.07
St. Paul Campus majors			-.03
Medicine & Health Sciences majors			-.03
Institute of Technology majors			-.06
Law majors			-.01
Management/Business majors			.01
Education majors			.06
Liberal Arts majors			.01
Undecided majors			-.03
Day school, full-time student status			.02
Day school, part-time student status			.01
Extension student status			-.02
Day school & Extension student status			-.03
Teaching Assistant			.07
Research Assistant			-.02
Teaching Associate			-.01
Administrative Fellow			-.01
Number of credits			-.07
Grade point average			.09
Sex (male)			-.01
Citizenship (foreign)			.09
Language (English)			-.08
Time spent mostly on the east bank, Minneapolis campus			-.02
Time spent mostly on the west bank, Minneapolis campus			-.04
Time spent mostly on the east & west banks, Minneapolis campus			.03
Time spent mostly on the St. Paul campus			.05
Time spent mostly on another campus			-.02

TABLE 27

MULTIPLE REGRESSION ANALYSIS OF THE USE/NONUSE OF THE PUBLIC-ACCESS PHOTOCOPY MACHINES ONTO THE DEMOGRAPHIC VARIABLES
(n = 560)

	R	R^2	r
Language (English)	.14	.02	-.14
Day school & Extension student status	.17	.03	.09
Citizenship (foreign)	.19	.04	.05
Non-significant variables			
Class			.07
Number of credits			.03
Day school, part-time student status			.04
St. Paul Campus majors			.06
Medicine & Health Sciences majors			.04
Institute of Technology majors			-.02
Law majors			-.02
Management/Business majors			-.07
Biological Sciences majors			.02
Education majors			-.01
Liberal Arts majors			.04
Undecided majors			-.05
Day school, full-time student status			-.08
Extension student status			-.03
Other student status			-.02
Teaching Assistant			.07
Research Assistant			-.03
Project Assistant			-.02
Teaching Associate			-.02
Administrative Fellow			-.01
Grade point average			.02
Sex (male)			-.02
Age			.09
Time spent mostly on the east bank, Minneapolis campus			-.04
Time spent mostly on the west bank, Minneapolis campus			-.00
Time spent mostly on the east & west banks, Minneapolis campus			.06
Time spent mostly on the St. Paul campus			-.04
Time spent mostly on another campus			.04

TABLE 28

MULTIPLE REGRESSION ANALYSIS OF THE USE/NONUSE OF THE PHOTOCOPY SERVICE ONTO THE DEMOGRAPHIC VARIABLES
(n = 560)

	R	R^2	r
Class	.09	.01	.09
Non-significant variables			
St. Paul Campus majors			-.04
Medicine & Health Sciences majors			.00
Institute of Technology majors			-.01
Law majors			-.02
Management/Business majors			.01
Biological Sciences majors			.05
Education majors			.03
Liberal Arts majors			.00
Undecided majors			-.06
Day school, full-time student status			-.07
Day school, part-time student status			.05
Extension student status			.02
Day school & Extension student status			.05
Other student status			-.02
Teaching Assistant			.09
Research Assistant			-.03
Project Assistant			.07
Teaching Associate			-.02
Administrative Fellow			-.01
Number of credits			-.06
Grade point average			.01
Sex (male)			-.00
Citizenship (foreign)			.08
Language (English)			-.06
Age			.08
Time spent mostly on the east bank, Minneapolis campus			-.04
Time spent mostly on the west bank, Minneapolis campus			-.03
Time spent mostly on the east & west banks, Minneapolis campus			.05
Time spent mostly on the St. Paul campus			.06
Time spent mostly on another campus			-.03

TABLE 29

MULTIPLE REGRESSION ANALYSIS OF THE USE/NONUSE OF OTHER UNLISTED SERVICES ONTO THE DEMOGRAPHIC VARIABLES
(n = 560)

	R	R^2	r
Liberal Arts majors	.14	.02	.14
Teaching Assistant	.18	.03	.12
Day school & Extension student status	.21	.04	.09
Non-significant variables			
Language (English)			.08
Class			.09
St. Paul Campus majors			-.01
Medicine & Health Sciences majors			-.00
Institute of Technology majors			-.06
Law majors			.07
Management/Business majors			-.07
Biological Sciences majors			-.04
Education majors			.02
Undecided majors			-.07
Day school, full-time student status			-.09
Day school, part-time student status			.04
Extension student status			.01
Other student status			-.03
Research Assistant			-.04
Project Assistant			-.02
Teaching Associate			-.02
Administrative Fellow			-.01
Number of credits			-.02
Grade point average			.09
Sex (male)			-.06
Citizenship (foreign)			-.07
Age			.08
Time spent mostly on the east bank, Minneapolis campus			-.01
Time spent mostly on the west bank, Minneapolis campus			.06
Time spent mostly on the east & west banks, Minneapolis campus			-.03
Time spent mostly on the St. Paul campus			-.02
Time spent mostly on another campus			.02

TABLE 30

MULTIPLE REGRESSION ANALYSIS OF THE USE/NONUSE OF NO SERVICES ONTO THE DEMOGRAPHIC VARIABLES
(n = 560)

	R	R^2	r
Institute of Technology majors	.20	.04	.20
Management/Business majors	.24	.06	.08
Education majors	.26	.07	-.16
Liberal Arts majors	.28	.08	-.18
Time spent mostly on another campus	.30	.09	-.09
Research Assistant	.31	.10	-.09
Non-significant variables			
Biological Sciences majors			-.06
Teaching Assistant			-.12
Day school & Extension student status			-.06
Class			-.16
St. Paul Campus majors			.00
Medicine & Health Sciences majors			.04
Law majors			.01
Undecided majors			.04
Day school, full-time student status			.04
Day school, part-time student status			.01
Extension student status			-.01
Other student status			-.02
Project Assistant			-.04
Teaching Associate			.01
Administrative Fellow			-.05
Number of credits			.04
Grade point average			-.07
Sex (male)			.12
Citizenship (foreign)			.01
Language (English)			.00
Age			-.12
Time spent mostly on the east bank, Minneapolis campus			.10
Time spent mostly on the west bank, Minneapolis campus			-.04
Time spent mostly on the east & west banks, Minneapolis campus			-.04
Time spent mostly on the St. Paul campus			-.05

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